

FCC MAIL SECTION

Before the
Federal Communications Commission
Washington, D.C. 20554

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DISPATCHED BY

PR Docket No. 92-164 ✓

In the Matter of

Amendment of Part 80 of the
Commission's Rules Concerning
Class C Emergency Position
Indicating Radio Beacons.

RM-7838

REPORT AND ORDER

Adopted: May 3, 1993;

Released: May 18, 1993

By the Commission:

I. INTRODUCTION

1. In a *Notice of Proposed Rule Making (Notice)*, 7 FCC Rcd 5102 (1992), the Commission proposed to amend Part 80 of the Rules, 47 C.F.R. Part 80, to phase out the use of Class C Emergency Position Indicating Radio Beacons (EPIRBs) after February 1, 1999. The *Notice* was initiated by a petition for rule making from the United States Coast Guard (Coast Guard).¹ This Report and Order adopts the rule amendments as proposed.

II. BACKGROUND

2. EPIRBs are small, battery powered transmitters carried on ships for the purpose of sending a distress signal. The distress signal is used both as an alarm to alert others that a ship is in distress and as a beacon to aid in its location by search and rescue (SAR) personnel. There are two general classes of EPIRBs: those primarily intended to be detected by satellite (satellite EPIRBs)² and those intended to be detected by nearby ship or coast stations (Class C EPIRBs). Satellite EPIRBs are used in conjunction with the COSPAS-SARSAT system of polar orbiting satellites that employ dedicated receivers to detect distress signals.³ These

satellites relay the EPIRB's distress signal and calculated position to SAR personnel. Class C EPIRB distress signals, however, are transmitted alternately on channels the COSPAS-SARSAT system does not receive. The distress signal is transmitted for a short period on marine VHF channel 16 for alerting, and for a long period on marine VHF channel 15 to allow SAR personnel to "home in" on the signal.⁴ Further, because Class C EPIRBs transmit at very low power, the effective range of the distress signal is limited, and ships in distress must rely on nearby stations to detect and respond to Class C EPIRBs' signals.

3. Both the Coast Guard and the Commission require certain vessels to carry EPIRBs for safety purposes. The Coast Guard, for example, requires all ocean-going cargo ships and passenger ships certified for ocean service or coastwise service more than 20 miles from a harbor to carry a satellite EPIRB. The Coast Guard also requires certain vessels certified for Great Lakes service to carry one or sometimes two Class C EPIRBs.⁵ The Coast Guard, however, will accept one 406 EPIRB as equivalent to two Class C EPIRBs. The Commission recently adopted regulations implementing the Global Maritime Distress and Safety System (GMDSS) which will require all passenger ships and all large cargo ships on international voyages to install a 406 EPIRB⁶ by August 1, 1993.⁷ Under the Commission's Rules, recreational boats and small commercial vessels are not required to carry an EPIRB but may voluntarily equip with either a satellite EPIRB or Class C EPIRB.

III. DISCUSSION

4. In its Petition the Coast Guard requested that the Commission eliminate the use of Class C EPIRBs by February 1, 1999.⁸ The Coast Guard pointed out the changes in watch requirements under GMDSS which will become effective in 1999. Further, it stated that it favors the use of satellite EPIRBs which it claims are widely used and much more effective in SAR incidents than Class C EPIRBs.⁹ Finally, the Coast Guard noted that it is currently recommending that ships use satellite EPIRBs in place of Class C EPIRBs. We agreed with the Coast Guard and proposed in the *Notice* to phase out the use of Class C EPIRBs. Our intent was to promote the safety of life and property at sea and to minimize the differences between Commission and Coast Guard requirements. Mr. Robert K. Tendler of Tendler Technologies, Inc. (Tendler), filed comments. Tendler and the Coast Guard filed Reply Comments.¹⁰

¹ RM-7838, Report 1866, October 28, 1991.

² We are using the term satellite EPIRB herein to include all categories of EPIRBs capable of being detected by satellite.

³ COSPAS-SARSAT is a joint international satellite-based search and rescue system established by Canada, France, the USSR, and the United States to detect and locate emergency radio beacons transmitting on 121.5 MHz or 406.025 MHz. The U.S. satellites in this system also monitor 243.0 MHz.

⁴ Marine VHF channel 16 is the international safety, distress and calling channel. Marine VHF channel 15 is used for environmental transmissions and Class C EPIRB distress transmissions.

⁵ See U.S. Coast Guard Navigation and Vessel Inspection Circular No. 9-91, May 31, 1991.

⁶ The term "406 EPIRB" refers to satellite EPIRBs that operate on the frequency 406.025 MHz. See 47 C.F.R. §§ 80.1053,

80.1055, 80.1059 and 80.1061.

⁷ The GMDSS is an automated ship-to-shore distress alerting system that relies on satellite and advanced terrestrial systems. The GMDSS regulations apply to cargo ships of 300 tons gross tonnage and over on international voyages or in the open sea, and to ships carrying twelve passengers or more irrespective of size on international voyages or in the open sea. These ships are termed "compulsory ships." See Report and Order, PR Docket 90-480, 7 FCC Rcd 951 (1992).

⁸ Implementation of the GMDSS commenced on February 1, 1992. The system is scheduled to be fully implemented by February 1, 1999.

⁹ Coast Guard Petition at 1.

¹⁰ We note in passing here that neither of the two Class C EPIRB manufacturers filed comments opposing the proposal.

5. Tendler opposes eliminating Class C EPIRBs. He argues that Class C EPIRBs provide one more method of emergency signaling and, thus, one more opportunity for increased safety at sea.¹¹ Further, Tendler takes exception to the statement in the *Notice* that the Coast Guard would discontinue its aural watch on channel 16 in 1999.¹²

6. The Coast Guard, in reply comments, reemphasizes the arguments it made in its petition that the switching of the watch channel from Channel 16 to Channel 70 under GMDSS will make Class C EPIRBs obsolete and that satellite EPIRBs are much more reliable. Further, it contends that Class C EPIRB distress signals may not be recognized or detected because these EPIRBs are so infrequently employed that the signal is unfamiliar to most vessel operators and even some Coast Guard watchstanders, and the distress signal is often masked due to congestion on Channel 16.¹³ The Coast Guard restates its request that the Commission eliminate Class C EPIRBs by 1999. In reply comments¹⁴ Tendler suggests that the answer to the Coast Guard's concerns regarding recognition of Class C EPIRB distress signals is to require that Class C EPIRBs have the Emergency Vessel Location System¹⁵ to enable Class C EPIRBs to transmit a synthesized voice distress message on channel 16 along with the distress signal in a manner similar to that provided for marine transmitters.¹⁶

7. EPIRBs are safety devices whose functions are to alert others that there is a ship in distress and to aid SAR personnel in locating that ship. To be effective three things must happen: the EPIRB must function properly (transmit an emergency signal), someone must hear the distress transmission, and someone must respond. At issue here is reception of the distress signal. As the Coast Guard points out, GMDSS, which will become mandatory in 1999, changes the mandatory watch requirements for vessels from marine VHF Channel 16 to an automated watch on Digital Selective Calling (DSC) Channel 70. DSC equipment is now available. As 1999 approaches and more and more ships employ DSC, there will be fewer ships able to hear Class C EPIRB distress calls, thereby drastically reducing their effectiveness.¹⁷ Further, even though the Coast Guard modified its position on a Channel 16 watch, stating that it would continue an aural watch on Channel 16 past 1999, it noted that it intended to discontinue the Channel 16 watch as soon as practicable after 1999. If no one is monitoring channel 16 for distress calls, Class C EPIRBs cannot be effective in saving lives and property. Moreover, allowing the continued use of these devices gives boaters a false sense of security. Therefore, we are phasing out the use of Class C EPIRBs. This action will promote the safety of life and property and make the Commission's Rules in this area more consistent with Coast Guard Rules and policy.

8. To ensure that this rule making causes as little disruption to the marine community as possible, we will permit the manufacture, importation, sale, and installation of Class C EPIRBs until February 1, 1995. To provide sufficient time for current users to obtain other EPIRBs, we will

grandfather the use of existing Class C EPIRBs until February 1, 1999. We believe that by coordinating this rule making to the implementation of GMDSS in 1999, we will allow sufficient time for the marine public to obtain another type of EPIRB and adapt to the changes in monitoring requirements.

IV. ORDERING CLAUSES

9. Accordingly, IT IS ORDERED THAT pursuant to the authority contained in Sections 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) and 303(r), Part 80 of the Commission's Rules, 47 C.F.R. Part 80, IS AMENDED as set forth below.

10. IT IS FURTHER ORDERED THAT this Report and Order will be effective (thirty days after publication in the Federal Register).

11. For further information, contact: Susan H.R. Jones, Private Radio Bureau, (202) 632-7175.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Donna R. Searcy
Secretary

FINAL RULE

Part 80 of Chapter I of Title 47 of the Code of Federal Regulations is amended as follows:

A. PART 80 - STATIONS IN THE MARITIME SERVICES

1. The authority citation for Part 80 continues to read as follows:

AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, unless otherwise noted. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609, 3 UST 3450, 3 UST 4726, 12 UST 2377.

2. Section 80.15 is amended by revising paragraph (e)(1) as follows:

§ 80.15 Eligibility for station license.

* * * * *

(e) EPIRB stations. (1) New class C EPIRB stations will not be authorized after February 1, 1995. Class C EPIRB stations installed and licensed before February 1, 1995, will be authorized until February 1, 1999:

alternately on marine VHF channels 15 and 16 according to a complex, preprogrammed cycle. The distress signal is, however, never transmitted on marine VHF channel 16 for more than 1.5 seconds. Tendler's suggestion, therefore, can not be accommodated under the current mode of operation.

¹⁷ The Coast Guard has petitioned the Commission to require a minimum DSC capability by 1999 for all ship station transmitters. RM-8031, Report No. 1899, July 13, 1992.

¹¹ Tendler comments at 2.

¹² Tendler comments at 2.

¹³ Coast Guard comments at 1.

¹⁴ Tendler filed late reply comments, received by the Secretary October 16, 1992. We have accepted them in order to have a complete record.

¹⁵ See Report and Order, PR Docket 91-294, 7 FCC Rcd 1608 (1992).

¹⁶ As noted above, Class C EPIRBs transmit a distress signal

3. Section 80.205 is amended by adding a new Footnote 13 to the "G3N" entry in the table in paragraph (a) to read as follows:

80.205 Bandwidths.

(a) ***

Class of Emission	Emission designator	Authorized Bandwidth (kHz)
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***** G3N ^{3,13}	***	***
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³ Applicable only to EPIRB's.

¹³ Class C EPIRB stations may not be used after February 1, 1999.

4. Section 80.207 is amended by adding a new Footnote 13 to the "156.750 and 156.800 MHz" entry in the table in paragraph (d) to read as follows:

80.207 Classes of emission.

(d) ***

Types of stations	Classes of emission
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Distress, Urgency, and Safety^{8,9}

156.750 and 156.800 MHz ¹³	***
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⁸ For direction finding equipment requirements see § 80.375.

⁹ Includes distress emissions used by ship, coast, EPIRB's and survival craft stations.

¹³ Class C EPIRB stations may not be used after February 1, 1999.

5. Section 80.209 is amended by adding a new Footnote 6 to the "Operating on 156.750 and 156.800 MHz" entry in the table in paragraph (a) to read as follows:

80.209 Transmitter frequency tolerances.

(a) ***

Frequency bands and categories of stations Tolerances ¹

(5) ***

(iv) ***

Operating on
156.750 and
156.800 MHz

¹ Transmitters authorized prior to January 2, 1990, with frequency tolerances equal to or better than those required after this date will continue to be authorized in the maritime services provided they retain type acceptance and comply with the applicable standards in this part.

⁶ Class C EPIRB stations may not be used after February 1, 1999.

6. Section 80.1057 is amended by adding an introductory paragraph to read as follows:

80.1057 Special requirements for Class C EPIRB stations

Class C EPIRBs shall not be manufactured, imported, or sold in the United States after February 1, 1995. Class C EPIRB stations installed on board vessels before February 1, 1995, may be used until February 1, 1999, and not thereafter.
